

IN THE CLAIMS

1. (currently amended) A method of treating or ; ameliorating, ~~or preventing~~ a hyperproliferative disease in a subject comprising administering to said subject a therapeutically effective dose of a gossypol compound and one or more second agent(s) selected from an anticancer agent and/or radiation, ~~with the proviso that a combination of (±) gossypol, heat, and radiation is not administered~~ wherein said gossypol compound is selected from the group consisting of (±)-ethyl gossypol, (-)-ethyl gossypol, (+)-ethyl gossypol, (±)-hemigossypolone, (-)-hemigossypolone, (+)-hemigossypolone, (±)-apogossypol, (-)-apogossypol, (+)-apogossypol, (±)-apogossypol acetic acid, (-)-apogossypol acetic acid, (+)-apogossypol acetic acid, (±)-ethyl apogossypol, (-)-ethyl apogossypol, and (+)-ethyl apogossypol.

2. (currently amended) The method of claim 1, wherein said gossypol compound is provided in a dose that sensitizes said subject to treatment by said one or more second agent(s) agents.

3-26. (canceled)

27. (original) The method of claim 1, wherein said hyperproliferative disease is associated with overexpression of a Bcl-2 family member protein.

28. (original) The method of claim 27, wherein said Bcl-2 family protein is Bcl-2, Bcl-X_L, Mcl-1, A1/BFL-1, BOO-DIVA, Bcl-w, Bcl-6, Bcl-8, or Bcl-y.

29. (original) The method of claim 1, wherein said subject is a human.

30. (original) The method of claim 1, wherein said hyperproliferative disease is cancer.

31. (currently amended) The method of claim 30, wherein said cancer is breast cancer, prostate cancer, pancreatic cancer, colon cancer, lung cancer, leukemia, lymphoma, melanoma, or head-neck cancer.

32. (original) The method of claim 30, wherein said cancer is metastatic.

33. (original) The method of claim 30, wherein said cancer is a tumor and the treatment or amelioration results in regression of the tumor.

34. (currently amended) The method of claim 30, wherein said cancer is resistant to anticancer agent and/or radiation therapy.

35. (currently amended) The method of claim 34, wherein said gossypol compound sensitizes said cancer to said anticancer agent and/or radiation therapy.

36. (currently amended) The method of claim 1, wherein said gossypol compound and said anticancer agent and/or radiation are administered simultaneously.

37. (currently amended) The method of claim 1, wherein said gossypol compound and said anticancer agent and/or radiation are administered sequentially.

38. (currently amended) The method of claim 37, wherein said gossypol compound is administered prior to said anticancer agent and/or radiation.

39. (currently amended) The method of claim 37, wherein said gossypol compound is administered after said anticancer agent and/or radiation.

40. (currently amended) The method of claim 1, wherein said gossypol compound and said anticancer agent and/or radiation are administered with different periodicities, different durations, different concentrations, and/or different administration routes.

41. (currently amended) The method of claim 1, wherein said anticancer agent and/or radiation is selected from docetaxel, paclitaxel TAXOL, cisplatin, carboplatin, radiation therapy, and combinations thereof.

42. (canceled)

43. (currently amended) The method of claim 1, wherein said gossypol compound and said anticancer agent and/or radiation have a synergistic therapeutic effect.

44. (original) The method of claim 1, wherein said disease is a neoplastic disease.

45. (original) The method of claim 1, wherein said second agent is radiation.

46. (currently amended) A pharmaceutical composition comprising a gossypol compound and one or more anticancer agents, wherein said gossypol compound is selected from the group consisting of (±)-ethyl gossypol, (-)-ethyl gossypol, (+)-ethyl gossypol, (±)-hemigossypolone, (-)-hemigossypolone, (+)-hemigossypolone, (±)-apogossypol, (-)-apogossypol, (+)-apogossypol, (±)-apogossypol acetic acid, (-)-apogossypol acetic acid, (+)-apogossypol acetic acid, (±)-ethyl apogossypol, (-)-ethyl apogossypol, and (+)-ethyl apogossypol.

47. (currently amended) The pharmaceutical composition of claim 46, wherein ~~said gossypol compound is (-)-gossypol~~ and said anticancer agent is selected from docetaxel, paclitaxel TAXOL, cisplatin, carboplatin, and combinations thereof.

48. (canceled)

49. (currently amended) A kit comprising a gossypol compound, one or more anticancer agents, and instructions for administering said gossypol compound and said anticancer agents to a subject, wherein said gossypol compound is selected from the group consisting of (±)-ethyl gossypol, (-)-ethyl gossypol, (+)-ethyl gossypol, (±)-hemigossypolone, (-)-hemigossypolone, (+)-hemigossypolone, (±)-apogossypol, (-)-apogossypol, (+)-apogossypol, (±)-apogossypol acetic acid, (-)-apogossypol acetic acid, (+)-apogossypol acetic acid, (±)-ethyl apogossypol, (-)-ethyl apogossypol, and (+)-ethyl apogossypol.

50. (currently amended) The kit of claim 49, wherein ~~said gossypol compound is (-)-gossypol~~ and said anticancer agent is selected from docetaxel, paclitaxel TAXOL, cisplatin, carboplatin, and combinations thereof.

51. (canceled)

52. (new) A method of treating or ameliorating a hyperproliferative disease in a subject comprising administering to said subject a therapeutically effective dose of a gossypol compound and one or more second agent(s) selected from docetaxel, paclitaxel, cisplatin, and/or radiation, wherein the combination of a gossypol compound and (a) second agent(s) produces a synergistic effect with respect to one or more of tumor shrinkage, tumor loss, time to tumor progression, or survival, with the proviso that a combination of (±)-gossypol, heat, and radiation is not administered.

53. (new) The method of claim 52, wherein said gossypol compound is provided in a dose that sensitizes said subject to treatment by said one or more second agent(s).

54. (new) The method of claim 52, wherein said gossypol compound is (±)-gossypol.

55. (new) The method of claim 52, wherein said gossypol compound is (-)-gossypol.
56. (new) The method of claim 52, wherein said gossypol compound is
(+)-gossypol.
57. (new) The method of claim 52, wherein said gossypol compound is
(±)-gossypolone.
58. (new) The method of claim 52, wherein said gossypol compound is
(-)-gossypolone.
59. (new) The method of claim 52, wherein said gossypol compound is
(+)-gossypolone.
60. (new) The method of claim 52, wherein said gossypol compound is (±)-gossypol
acetic acid.
61. (new) The method of claim 52, wherein said gossypol compound is (-)-gossypol
acetic acid.
62. (new) The method of claim 52, wherein said gossypol compound is (+)-gossypol
acetic acid.
63. (new) The method of claim 52, wherein said gossypol compound is (±)-ethyl
gossypol.

64. (new) The method of claim 52, wherein said gossypol compound is (-)-ethyl gossypol.

65. (new) The method of claim 52, wherein said gossypol compound is (+)-ethyl gossypol.

66. (new) The method of claim 52, wherein said gossypol compound is (±)-hemigossypolone.

67. (new) The method of claim 52, wherein said gossypol compound is (-)-hemigossypolone.

68. (new) The method of claim 52, wherein said gossypol compound is (+)-hemigossypolone.

69. (new) The method of claim 52, wherein said gossypol compound is (±)-apogossypol.

70. (new) The method of claim 52, wherein said gossypol compound is (-)-apogossypol.

71. (new) The method of claim 52, wherein said gossypol compound is (+)-apogossypol.

72. (new) The method of claim 52, wherein said gossypol compound is (±)-apogossypol acetic acid.

73. (new) The method of claim 52, wherein said gossypol compound is (-)-apogossypol acetic acid.

74. (new) The method of claim 52, wherein said gossypol compound is (+)-apogossypol acetic acid.

75. (new) The method of claim 52, wherein said gossypol compound is (\pm)-ethyl apogossypol.

76. (new) The method of claim 52, wherein said gossypol compound is (-)-ethyl apogossypol.

77. (new) The method of claim 52, wherein said gossypol compound is (+)-ethyl apogossypol.

78. (new) The method of claim 52, wherein said hyperproliferative disease is associated with overexpression of a Bcl-2 family member protein.

79. (new) The method of claim 78, wherein said Bcl-2 family protein is Bcl-2, Bcl-X_L, Mcl-1, A1/BFL-1, BOO-DIVA, Bcl-w, Bcl-6, Bcl-8, or Bcl-y.

80. (new) The method of claim 52, wherein said subject is a human.

81. (new) The method of claim 52, wherein said hyperproliferative disease is cancer.

82. (new) The method of claim 81, wherein said cancer is breast cancer, prostate cancer, pancreatic cancer, colon cancer, lung cancer, leukemia, lymphoma, melanoma, or head-neck cancer.

83. (new) The method of claim 82, wherein said cancer is breast cancer or prostate cancer.

84. (new) The method of claim 81, wherein said cancer is metastatic.

85. (new) The method of claim 81, wherein said cancer is a tumor and the treatment or amelioration results in regression of the tumor.

86. (new) The method of claim 85, wherein the treatment or amelioration results in complete regression of the tumor.

87. (new) The method of claim 81, wherein said cancer is resistant to anticancer agent or radiation therapy.

88. (new) The method of claim 87, wherein said gossypol compound sensitizes said cancer to said anticancer agent(s) and/or radiation therapy.

89. (new) The method of claim 52, wherein said gossypol compound and said one or more second agent(s) are administered simultaneously.

90. (new) The method of claim 52, wherein said gossypol compound and said one or more second agent(s) are administered sequentially.

91. (new) The method of claim 90, wherein said gossypol compound is administered prior to said one or more second agent(s).

92. (new) The method of claim 90, wherein said gossypol compound is administered after said one or more second agent(s).

93. (new) The method of claim 52, wherein said gossypol compound and said one or more second agent(s) are administered with different periodicities, different durations, different concentrations, and/or different administration routes.

94. (new) The method of claim 52, wherein said gossypol compound is (-)-gossypol.

95. (new) The method of claim 52, wherein said disease is a neoplastic disease.

96. (new) The method of claim 52, wherein said second agent is radiation.